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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/769,966

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Shen-Hong Chou

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10/27/2006

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EXAMINER

TSIDULKO, MARK

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 10/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/769,966	<b>Applicant(s)</b> CHOU, SHEN-HONG	
	<b>Examiner</b> Mark Tsidulko	<b>Art Unit</b> 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,7,9-12,17,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,7,9-12,17,19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

The submission of amendment filed on is acknowledged. At this point claims 1 and 11 have been amended, claims 3-6, 8, 13-16 and 18 have been canceled and the remaining claims left unchanged. Thus, claims 1, 2, 7, 9-12, 17, 19, 20 are at issue in the instant application.

#### *Drawings*

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the *each basic cell structure comprising first, second, third and fourth light emitting diodes* must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

The disclosure is objected to because of the following informalities: description of amended specification (page 2, lines 17-19) contradicts the description that “basic cell structure consisting of first, second and third LEDs” (same page, lines 11, 12).

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

Claims 1, 2, 7, 9-12, 17, 19 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims 1 and 11 contain subject matter “*each basic cell structure comprising three unique colors of first, second, third and fourth light emitting diodes 61, 62, 63, 64*” which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. According to Fig.2C, which is schematic view of a basic cell structure 60, each basic cell structure includes only three LEDs, therefore it is unclear how the three LEDs can be arranged in a quadrilateral, as disclosed in amended specification. LED indicated with reference character “64” on Fig.3B belongs to the adjacent cell.

Claims 2, 7, 9, 10, 12, 17, 19 and 20 are necessarily included because of their depending.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, 7, 9-12, 17, 19, 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to Claims 1, 2, 11, 12 it is indefinite how the cell having three LEDs can include three unique colors, if two of three LEDs are green (claim 1, line 6; claim 11, line 7).

Claims 7, 9, 10 are rejected as claims depended on claim 1.

Claims 17, 19, 20 are rejected as claims depended on claim 11.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 9, 11, 12, 19, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Lin et al. (US 6,856,087).

Referring to Claims 1, 11 Lin et al. disclose (Fig.5H) a display device having a plurality of cells [51] wherein each cell has three colors LEDs arranged in equilateral triangle.

Referring to Claims 2, 12 Lin et al. disclose (Fig.5H) that the LEDs are red, blue and green.

Referring to Claims 9, 19 Lin et al. disclose (Fig.5B) a planar surface, on which the light source is provided.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 17 as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US 6,856,087) .

Lin et al. disclose the instant claimed invention except for varying the intensity of the cell by varying power to one of the LEDs.

The intensity of the cell, composed of three LEDs, will be inherently varied, if power varying will change the intensity of any member of the cell. It is understood, that the value of the power to any of the LEDs can be provided depending on necessity what intensity of the cell should be obtained.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the variable power supply of the LEDs in the device of Lin et al. in order to obtain variable color balance.

Claims 10, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US 6,856,087) in view of Frank et al. (US 4,125,319).

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Lin et al. discloses the instant claimed invention except for light control and dispersion device.

Frank et al. disclose a light control device disposed above the light source (Fig.4) and including a dispersion layer (Abstract, col.11, line 60)

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the light control device of Frank et al. for the device of Lin et al. in order to control the light rays incident on an operative area.

#### ***Response to Arguments***

Applicant's arguments filed 8/28/2006 have been fully considered but they are not persuasive.

Applicant argues, that Lin et al. does not disclose a cell structure including four LEDs.

In response, the drawings and specification of the instant application disclosed a cell structure having three LEDs, but not four.

Applicant argues, that the combination of Lin et al. and Frank et al. is improper, because these references do not provide motivation.

In response, it is well known, that in a situation, when the prior art does not provide motivation for combination, the motivation could be based on the knowledge and experience of the Examiner.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Tsidulko whose telephone number is (571)272-2384. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR




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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M.T.

October 23, 2006



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